

IX.6.2-SYSTEM-EMPFIT SUBROUTINE EMPFIT

Description

Subroutine EMPFIT estimates quantiles of specific exceedence probabilities based on the empirical distribution function (i.e. the probability of exceeding a value X is estimated by the ratio of the number of values greater than X divided by N+1 where N is the total number of observations).

Calling Sequence

```
CALL EMPFIT (Y,N,PP,NUMFR,PX,NUAR,PNE)
```

Argument List

<u>Argument</u>	<u>Input/ Output</u>	<u>Type</u>	<u>Dimension</u>	<u>Description</u>
Y	Input	R*4	50	Contains time series values
N	Input	I*4	1	Number of values in the time series
PP	Output	R*4	20	Quantiles corresponding to the exceedence probabilities in PX
NUMFR	Input	I*4	1	Number of user specified exceedence probabilities
PX	Input	R*4	20	User specified exceedence probabilities
NUAR	Input	I*4	1	Type of output variable
PNE	Output	R*4	1	For output variables 7 and 8 fraction of time series values for which criterion is reached